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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/886,521

06/20/2001

Charles A. Miller

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11/03/2003

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EXAMINER

NGUYEN, TRUC T

ART UNIT

PAPER NUMBER

2833

DATE MAILED: 11/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/886,521

Applicant(s)

MILLER ET AL.

Examiner

Truc T. T. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☒ Claim(s) 14-16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Kuballa (US 4,139,727).

Kuballa disclose an apparatus comprising:

a substrate (17) a plurality of through holes (14); and

a plurality of cables (1) each comprising a conductor (10), each cable extending through respective ones of the plurality of through holes of the substrate (see Figures 3-4) and terminating about a surface of the substrate such that the conductors of the respective ones of the plurality of cables are planarly aligned and available for electrical contact.

3. Claims 1-7, and 10-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Maeda (US 6,152,744).

Regarding claims 1-2, Maeda disclose an apparatus comprising:

a substrate (1) having a plurality of through holes (un-numbered, see Figure 7); and

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a plurality of coaxial cables (29), each comprising a conductor (30) and a shield (34) extending through respective one of the plurality of through holes of the substrate and terminating about a surface of the substrate such that the conductors of the respective ones of the plurality of cables are planarly aligned and available for electrical contact (see Figures 6 & 7).

Regarding claim 3, Maeda discloses the through holes of the substrate are configured such that conductors (30) are aligned with respective contact points (16) of an electronic component (6).

Regarding claim 4, Maeda discloses the electronic component (6) is a circuit test component of testing socket (1).

Regarding claim 5, Maeda discloses the electronic component (6) is an interposer.

Regarding claim 6, Maeda disclose the surface of the substrate comprise of dielectric material.

Regarding claim 7, Maeda discloses contact pads (16) are coupled to respective conductors at the surface of the substrate.

Regarding claim 10, Maeda discloses the plurality of cables comprise first conductors (29) designated as data signal line between the first electronic component (6) and a second electronic component (not show, which will be connected to a free end of the cable 29, see Figure 6).

Regarding claims 11 and 12, Maeda disclose the second group of cables (29) dispose in different second area (see Figure 6, group of cable 26 on the right area) but silently whether those cable could be used for supply and return lines or not. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not

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differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitation. *Ex Parte Masham*, 2 USPQ2d 1647 (1987).

Regarding claim 13, Maeda disclose the first conductor is disposed in a first area (see Figure 6, group of cable 29 on the left area).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maeda (US 6,152,744) in view of Finn et al. (US 6,233,818).

Maeda substantially disclose the claimed invention except for the conductor being coat with one of gold, platinum, palladium, or other metallic conductor.

Finn et al. teach a contact (138) being coated with gold (145).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a gold coating into Maeda's conductor, as taught by Finn et al. for increasing the oxidation resistance (column 15, lines 40-55).

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Allowable Subject Matter

6. Claims 14-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is an examiner's statement of reasons for allowance:

The prior art of record fails to teach a second substrate coupled to the first substrate.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Truc T. T. Nguyen whose telephone number is 703-306-4004. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Bradley can be reached on 703-308-2319. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.



10/29/03

T. Nguyen